UTILITY SYSTEMS

General Purpose: For the purposes of privatizing utilities I.A.W. Title 10 United States Code Section 2688, Utility Systems are defined, and points of demarcation identified, delineating the areas of responsibility of the utility privatization contractor and those retained by the installation or assigned to another contractor, such as a BASEOPS (e.g., an A-76 (Commercial Activities)) contractor or RCI (Residential Communities Initiative) contractor.

a. Electrical System: Include all fixed generations plants, power transmission and distribution lines (overhead and underground), wire, conduit, poles, transformers, switching stations, and signaling equipment used in the distribution of electrical power from a point of entry onto the installation to the point of demarcation into each facility on the installation. The point of demarcation is the point along the utility service line at which the responsibility transitions from the utility system privatization contractor to the installation Directorate of Public Works (DPW) or BASEOPS or RCI contractor.

For multi-unit housing, administrative, commercial or industrial facilities, the point of demarcation generally would be that point where a meter, main panel, or disconnect switch would be installed on a similar, non-military facility. Transition always occurs at a disconnect switch, if one is installed, otherwise at the line side of the panel or the load side of the meter, whichever is furthest from either an outside or inside pad-mounted transformer. For single dwelling units and smaller administrative facilities, if a meter, main panel, or disconnect switch exists, transition occurs at the line side of the panel or switch meter, or the load side of the meter. If none of the above exists, transition at the weather head. (See charts 1-3).

As an option, privatization actions may include street and parking lot lighting, exterior pole-mounted lights, airfield and sports lighting, ramp lighting, and traffic signal systems; including controls and branch circuits. Careful consideration must be made prior to including these items in any privatization initiative, because in some cases, certain utility providers may not be able to own these systems, thereby limiting potential owners and competition, which must be as free and open as possible. These systems are a function of the facility they serve and its use and may be contracted separately for maintenance. A request to exempt these optional items from analysis of the electrical system is not required.

It is important to note the electrical distribution system does not normally include area lighting mounted to buildings, signage or walkways. Also note that 100% metering of installation facilities is not required.

- **b. Gas Distribution System**: Include all regulating valves; pressure reducing valves; meters and metering devices; pumping stations; mains; laterals; and branches from point of entry onto the installation to the point of demarcation into a government facility or structure. The point of demarcation may normally be considered to be that point where a meter, pressure regulator, or shutoff valve would be installed on a similar, non-military facility. Thus, for housing, administrative, commercial or industrial facilities, transition occurs at the downstreamside of the meter, pressure regulator, or shutoff valve at the facility. If more than one apparatus is installed, transition at the downstreamside of the nearest device to the exterior of the facility. If no device exists, install a meter and / or shut off valve and transition at that point. (See chart 4).
- c. Potable Water System: Include all wells and appurtenances, surface (impoundment or river) water intake facilities, plants, regulating valves, control valves, pressure reducing valves, meters and metering devices, primary and booster pump stations, mains, water treatment facilities, water tanks, laterals, and branches. For installations with an on-site water supply, the system would be inclusive from the water source (water well, impoundment or river) to the point of demarcation. For installations which purchase water from an off-site supplier. from point of entry onto the installation to the point of demarcation on the water service line where it connects to a government facility or structure. The point of demarcation is considered to be that point where a meter, shut off valve, or backflow prevention device would be installed on a similar, off-site facility. Traditionally, water service lines belong to and are the responsibility of the property owner, however, under utility privatization, it may be more beneficial to the government that these be made part of the new utility providers system as well. Thus for housing, administrative, commercial and industrial facilities. transition occurs at the down stream side of the meter or service valve to the facility, or the up stream side of a backflow prevention device. If more than one apparatus is installed, transition is at the appropriate side of the nearest device to the exterior of the facility. If no apparatus exists, transition would occur where the service line enters the facility, however, it is highly recommended that a shutoff valve and meter be installed and transition be as described above. At a minimum, each facility service line should have a shut off valve installed.

Include fire hydrants and piping from water main to hydrants as integral parts of the water distribution system to be privatized. Also, include supply lines for fire suppression systems from the water main to the building, transitioning at the first valve down stream from the back flow prevention device. Include the service line up to the point of entry into the building, if the PIV (position indicator valve) or service valve is greater than 25-feet from the building.

Do not include deluge systems or interior suppression systems, but do include supply lines feeding these systems transitioning at the first valve or post indicator. Do not include water sprinklers, irrigation systems or non-potable water

systems unless they are not severable from the water system. Transition supply lines to these systems at the connection to the water main. (See charts 5, 6, and 7)

d. Wastewater System: Include all plants, sewer collection pipes and building or facility service lines, from the demarcation point where it exits the serviced building or facility to the point where the system leaves the installation and discharges to a public sewer or a receiving body of water. Transition occurs at the building exterior, even when a wastewater flow meter is located on the building service line. Transition occurs at the upstream side of an outside or yard cleanout and the downstream side of a backflow prevention device, grease trap, or oil/water separator that serve a series of buildings or a major industrial complex. Traditionally, sewer service lines belong to and are the responsibility of the property owner, however, under utility privatization, it may be more beneficial to the government that these be made part of the new utility providers system as well. Include all pumping stations; lift stations; and treatment facilities or systems, such as industrial waste treatment facilities that serve more than one industrial process, facility or building, treat both domestic and industrial wastes, and operate continuously.

As a rule, do not include the following: (a) backflow protection devices, grease traps and oil-water separators that are part of a building plumbing system even when located outside but adjacent to the building; (b) small wastewater treatment systems, such as septic tanks, leaching fields, small package plants or proprietary systems, and lagoons that serve small individual buildings; (c) contaminated groundwater remediation facilities; or (d) industrial waste treatment systems serving a specific process or separate facility where the effluent is reused by the process or facility, operates intermittently, or be laid away for an extended period of time. (See charts 8 and 9).

NOTES:

- (1) These definitions are to be followed as a general rule. There are exceptions to every rule and installations that have unique circumstances may request consideration of their specific situations, such as prevailing state-, local-, or industry-utility regulations, standards and/or practice.
- (2) These Facility Category Codes, found in DA Pam 415-28, generally describe systems being considered for privatization:
- (a) Electrical Power (Source, Transmission and Distribution Lines, Switching and Sub-Stations): 811-13, 811-15, 811-17, 811-22, 811-50, 811-60, 811-71, 812-30, 812-41, 812-42, 813-20, 813-50, and 813-60
- (b) Gas (Source, Transmission and Distribution); 823-10 and 824-10
- (c) Potable Water (Supply, Treatment, Storage and Distribution): 841-10, 841-25, 841-
- 30, 841-41, 841-50, 842-10, and 842-15
- (d) Sewage (Treatment, Disposal and Collection): 831-10, 831-12, 831-13, 831-50, 832-10, and 832-20